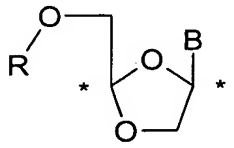
The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

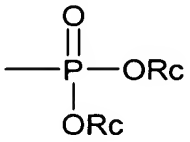
Claims 1-10 (Cancelled)

11. (New) A method for treating leukemia in a host comprising administering to the host having leukemia a therapeutically effective amount of cytarabine and at least one compound of general formula I



(I)

wherein B is cytosine or 5-fluorocytosine and R is selected from the group comprising H, monophosphate, diphosphate, triphosphate, carbonyl substituted with a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, and



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wherein each Rc is independently selected from the group comprising H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl and hydroxy protecting groups, and wherein said compound is substantially in the form of the (-) enantiomer.

12. (New) A method according to claim 11, wherein the leukemia is chronic myelogenous leukemia.

13. (New) A method according to claim 11, wherein the leukemia is acute myelogenous leukemia.

14. (New) A method according to claim 11, further comprising the step of administering a multidrug resistance reversing agent or a biological response modifier.

15. (New) A method according to claim 14, wherein the multidrug resistance agent is PSC 833.

16. (New) A method according to claim 14, wherein the biological response modifiers are selected from the group consisting of monoclonal antibodies and cytokines.

17. (New) A method according to claim 14, wherein the cytokines are selected from the group consisting of interferons, interleukins and colony-stimulating factors.

18. (New) A method according to claim 14, wherein the biological response modifiers are selected from the group consisting of Rituxan, CMA-676, Interferon-alpha recombinant, Interleukin-2, Interleukin-3, Erythropoetin, Epoetin, G-CSF, GM-CSF, Filgrastim, Sargramostim and Thrombopoietin.

19. (New) A method according to claim 11, wherein the compound of formula I and cytarabine are administered sequentially.

20. (New) A method according to claim 11, wherein the compound of formula I and cytarabine are administered simultaneously.

21. (New) A method according to claim 11, wherein said compound is (-)-β-L-Dioxolane-Cytidine (β -L-oddC) or a pharmaceutically acceptable salt thereof.

22. (New) A method according to claim 21, wherein said compound is (-)-β-Dioxolane-5-fluoro-Cytidine (5-FddC).

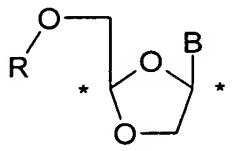
23. (New) A method according to claim 11, wherein said compound is at least 97% free of the corresponding (+) enantiomer.

24. (New) A method according to claim 11, wherein said compound is at least 99% free of the corresponding (+) enantiomer.

25. (New) A method according to claim 21, wherein said compound is at least 97% free of the corresponding (+) enantiomer.

26. (New) A method according to claim 21, wherein said compound is at least 99% free of the corresponding (+) enantiomer.

27. (New) A pharmaceutical composition comprising cytarabine and at least one compound of formula I

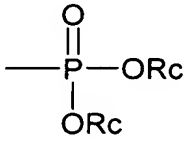


(I)

wherein

B is cytosine or 5-fluorocytosine,

R is H, monophosphate, diphosphate, triphosphate, carbonyl substituted with a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, or Rc is in each case independently H, C_{1-6}



alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl or a hydroxy protecting group, and wherein said compound is substantially in the form of the (-) enantiomer.

28. (New) A composition according to claim 27, further comprising a pharmaceutically acceptable carrier.

29. (New) A composition according to claim 27, further comprising a multidrug resistance reversing agent or a biological response modifier.

30. (New) A composition according to claim 29, wherein the multidrug resistance agent is PSC 833.

31. (New) A composition according to claim 29, wherein said biological response modifier is a monoclonal antibody or a cytokine.

32. (New) A composition according to claim 31, wherein said cytokine is an interferon, an interleukin or a colony-stimulating factor.

33. (New) A composition according to claim 29, wherein the biological response modifier is Rituxan, CMA-676, Interferon-alpha recombinant, Interleukin-2, Interleukin-3, Erythropoetin, Epoetin, G-CSF, GM-CSF, Filgrastim, Sargramostim or Thrombopoietin.

34. (New) A composition according to claim 27, wherein said compound is (-)-β-L-Dioxolane-Cytidine (β -L-oddC) or a pharmaceutically acceptable salt thereof.

35. (New) A composition according to claim 28, wherein said compound is (-)-β-L-Dioxolane-Cytidine (β -L-oddC) or a pharmaceutically acceptable salt thereof.

36. (New) A composition according to claim 34, wherein said compound is (-)-β-Dioxolane-5-fluoro-Cytidine (5-FddC) or a pharmaceutically acceptable salt thereof.

37. (New) A composition according to claim 35, wherein said compound is (-)-β-L-Dioxolane-Cytidine (β -L-oddC).

38. (New) A composition according to claim 27, wherein said compound is

at least 97% free of the corresponding (+) enantiomer.

39. (New) A composition according to claim 27, wherein said compound is at least 99% free of the corresponding (+) enantiomer.

40. (New) A composition according to claim 28, wherein said compound is at least 97% free of the corresponding (+) enantiomer.

41. (New) A composition according to claim 28, wherein said compound is at least 99% free of the corresponding (+) enantiomer.

42. (New) A composition according to claim 34, wherein said compound is at least 97% free of the corresponding (+) enantiomer.

43. (New) A composition according to claim 34, wherein said compound is at least 99% free of the corresponding (+) enantiomer.

44. (New) A composition according to claim 35, wherein said compound is at least 97% free of the corresponding (+) enantiomer.

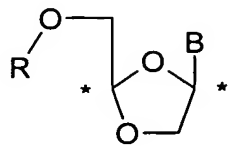
45. (New) A composition according to claim 35, wherein said compound is at least 99% free of the corresponding (+) enantiomer.

46. (New) A composition according to claim 27, wherein said composition is in unit dosage and contains 10 to 1500 mg of said compound per unit dosage form.

47. (New) A composition according to claim 27, wherein said composition is in unit dosage and contains 20 to 1000 mg of said compound per unit dosage form.

48. (New) A composition according to claim 27, wherein said composition is in unit dosage and contains 50 to 700 mg of said compound per unit dosage form.

49. (New) A pharmaceutical combination comprising cytarabine and at least one compound of formula



(I)

wherein

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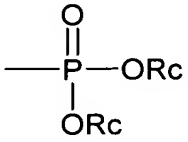

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Rc is in each case independently H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl or a hydroxy protecting group, and wherein said compound is substantially in the form of the (-) enantiomer.

50. (New) A combination according to claim 49, wherein said compound of formula I is (-)-β-L-Dioxolane-Cytidine (β -L-oddC) or a pharmaceutically acceptable salt thereof.